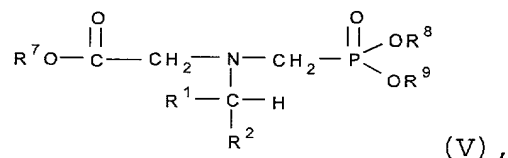


ABSTRACT

5 This invention is directed to an improved process for the preparation of N-(phosphonomethyl)glycine (i.e., "glyphosate"), a salt of N-(phosphonomethyl)glycine, or an ester of N-(phosphonomethyl)glycine. The process comprises
10 combining an N-substituted N-(phosphonomethyl)glycine reactant with oxygen in the presence of a noble metal catalyst. The N-substituted N-(phosphonomethyl)glycine reactant has formula (V):



15 wherein R¹ and R² are independently selected from the group consisting of hydrogen, halogen, -PO₃R¹²R¹³, -SO₃R¹⁴, -NO₂, hydrocarbyl, and substituted hydrocarbyl other than -CO₂R¹⁵; and R⁷, R⁸, R⁹, R¹², R¹³, R¹⁴, and R¹⁵ are independently selected from the group consisting of
20 hydrogen, hydrocarbyl, substituted hydrocarbyl, and an agronomically acceptable cation.